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Reply to Office action of 11/04/2005

REMARKS/ARGUMENTS

The Examiner has withdrawn the previous rejections under 35 U.S.C. § 112, second paragraph. However, the Examiner objects to Figures 5 and 6 because the figures allegedly do not include lead lines indicating what is illustrated and fail to show the example described on p. 13 of the specification (i.e., UA 732 delayed 45 minutes). The Examiner continues to reject Claims 1-4 and 6-20 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,496,568 to Nelson. The Official Action also rejects Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Nelson in view of U.S. Patent No. 6,246,320 to Monroe.

Applicants present arguments herein which distinguish the cited references and do not raise new issues, as will be explained in further detail below. Applicants also present arguments to overcome the objections to the drawings. Therefore, Applicants submit that the pending claims are in condition for immediate allowance..

A.   Objections to the Drawings

The Examiner objects to Figures 5 and 6 "because there are no lead lines indicating what is going on as described in the specification." In addition, the Examiner objects to Figures 5 and 6 for failing to illustrate the example described in the specification, i.e., UA 732 is delayed 45 minutes.

Applicants respectfully submit that the objections to Figures 5 and 6 are erroneous. In this regard, the specification clearly indicates that Figures 5a and 5b are examples of a Gantt chart for departure and arrival of airplanes, which can be updated and monitored for changes (page 12, ¶ 41). As described in the specification of the present application:

> A source system publishes information that has changed states (i.e., an event). For example, **FIGS. 5a and 5b** are examples of a Gantt chart for departure and arrival of airplanes. Such a chart is updated as new information is received – for example, notification a flight is delayed. A source system monitors the chart for any such changes in information and publishes all such changes. *Id.*

Thus, it is apparent that Figures 5a and 5b illustrate that the source system of one embodiment of the present invention monitors the displayed chart for changes. 37 C.F.R. §1.81 simply requires the drawings to "include illustrations that facilitate the understanding of the invention." As such,

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Figures 5a and 5b provide an example of how information is published and monitored by the source system in the form of a Gantt chart. The Gantt charts do not lend themselves to lead lines, and lead lines are not "essential for a proper understanding of the disclosed invention" (see MPEP § 608.02(d)).

Furthermore, Figures 6a and 6b show a flight operating system control board, which is described as an exemplary listening-receiving system ("LRS") (pages 13-14, ¶ 46). The specification of the present application states:

> After the LRS has detected the event, it will respond according to the new information. For example, if the LRS is a flight operating system, the system may use the information automatically to reschedule ground crew depending on the contents of the new information. **FIGS. 6a and 6b show a flight operating system control board. With information that a flight has been delayed an hour, the flight operating system can reschedule the ground crew according to this new information.** Other examples include the following. . . . *Id.*

As such, Figures 6a and 6b are examples of a flight operating system control board according to one embodiment of the present invention. Contrary to the Examiner's objection, the specification does not indicate that Figures 6a and 6b illustrate "that a flight has been delayed an hour." Rather, a flight delay or other event may affect the scheduling of the ground crew schedule shown in the flight operating system control board of Figures 6a and 6b. It is therefore submitted that Figures 6a and 6b are clear and do not require lead lines in order to "facilitate the understanding of the invention."

Applicants also respectfully disagree with the objection of Figures 5 and 6 for failing to show an example disclosed in the specification of the present application. In this regard, the specification nowhere indicates that Figures 5 and 6 include the example "UA 732 delayed 45 minutes." Namely, the specification states that:

> Once the LRS has subscribed to an event, the LRS listens for the event (step 305). The source system will publish all events, and the LRS may detect publication of those events to which it has subscribed. For example, the source system may publish the event "UA 732 delayed 45 minutes." If the LRS subscribes to events relating to UA 732, it will detect this event. If it subscribes to UA 123 but not UA 732, it will not detect the event. Page 13, ¶ 44.

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Applicants submit that the specification clearly indicates that the example "UA 732 delayed 45 minutes" is an example of event that may be published. The specification nowhere indicates that this particular example is shown in Figures 5 and 6. In the Response to Arguments, the Examiner indicates that the Applicants stated that this particular example is shown in Figure 5 in the previous Amendment dated September 15, 2005. However, Applicants respectfully disagree, as the previous Amendment provided an example of an event (i.e., UA 732 delayed 45 minutes) and an example of a publication (i.e., a Gantt chart) that may be used to monitor events. The previous Amendment nowhere indicated a correlation between the exemplary event and the exemplary chart, nor that the exemplary event was depicted in Figures 5 and 6. Moreover, Applicants submit that this single example of an event is not "essential for a proper understanding of the disclosed invention," as the specification of the present application discloses several examples of events to better understand the present invention, none of which are essential to be illustrated for understanding the invention (see e.g., pages 12 and 13, ¶ 43).

Therefore, Applicants submit that the objections to Figures 5 and 6 of the present application are overcome and respectfully requests that the objections be withdrawn.

B.   The Rejections under 35 U.S.C. § 102(e) are Overcome

The Official Action rejects independent Claims 1, 2, 9, and 10 under 35 U.S.C. § 102(e) as being anticipated by Nelson (Applicants refer to the Amendment dated September 15, 2005 for a discussion of Nelson). Independent Claim 1 of the present application recites detecting a first event of a plurality of events, wherein detecting the first event includes monitoring information from a memory for the occurrence of an event and publishing the first event upon occurrence of the first event. Claim 1 also recites automatically transmitting a notification to a first entity of the first event, wherein the first entity has previously subscribed to receive notification of the first event. Independent Claim 9 includes similar recitations in the context of a computer-readable medium, while independent Claims 2 and 10 also include similar recitations

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in the context of a method and data processing system, respectively, for notifying entities of travel-related events.

In the Response to Arguments addressing the rejections under 35 U.S.C. § 102(e) (improperly labeled as § 102(a)), the Examiner indicates that the "Applicants [sic] own admission of what the prior art teaches is sufficient still to meet the scope, for 102 purposes, of what the Applicant claims," and that Nelson "inherently must monitor information from a memory in order to know which subscribers to notify." Moreover, the Examiner finds that publish/subscribe technology was old and well known at the time of the invention, and the specification of the present application "defines listening systems as one that is capable of receiving and further states that the distinction may not even be relevant." In addition, the Examiner finds that Nelson only requires "polling" in one embodiment, and cites Newton's Telecom Dictionary ("Dictionary"), which purportedly demonstrates that "push" technology was old and well known at the time of the invention. The Examiner appears to be indicating that the claims are obvious over Nelson and the alleged common knowledge and Dictionary rather than being anticipated.

Regarding the Examiner's statement that publish/subscribe technology was old and well known at the time of the invention (including the Examiner's own example), Applicants request that the Examiner provide a reference or other evidence supporting this assertion, as this conclusion is not "instant and unquestionable" as being well known at the time of the invention (MPEP § 2144.03) ("Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known.").

Moreover, Applicants' alleged "admission" is misplaced, as the summary of Nelson provided in the previous Amendment dated September 15, 2005 corresponds to specific disclosure of Nelson (see col. 1, lines 40-44 and 52-54; col. 2, lines 17-25 and 40-47) rather than any particular admission as to what Nelson may teach or suggest. In any event, Applicants disagree that Nelson discloses monitoring information from a memory for the occurrence of an event, as monitoring information for the occurrence of an event is distinctly different from "monitor[ing] information from a memory in order to know which subscribers to notify." Even

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assuming that Nelson discloses accessing a database of subscribers to notify, <u>Nelson does not
disclose monitoring a database for the occurrence of an event</u>. Applicants submit that there is a
distinct difference between polling or otherwise accessing an airline database that simply
maintains flight, frequent flyer, ticketing, and other information as in Nelson, and a system that
utilizes publish/subscribe technology to publish events upon occurrence to a database that is then
utilized for supporting dissemination of notification of specified events to respective subscribers
that are interested in receiving notification as in the claimed invention.

     Furthermore, even if Nelson discloses that the customer message manager may receive
airline information directly from the airline system or in response to polling an airline system,
Nelson still does not teach or suggest that the customer message manager employs
publish/subscribe technology, as recited by independent Claims 1, 2, 9, and 10. As described in
the present application, a source system publishes events as they occur and updates the published
information as information is received or changed (see ¶¶ 41 and 45). Once the system has
subscribed to an event, the system "listens" for the event and may detect publication of those
events to which it has subscribed. By providing a network and using publish/subscribe
technology, as set forth by the claimed invention and as defined by the present application,
entities may continuously receive notification of events as they occur, which is unlike that
disclosed by Nelson where polling or directly accessing the airline system is employed to receive
event information.

     Regarding the specification of the present application, which states that "although a
distinction is made between devices including and not including the ability to listen, one skilled
in the art would recognize that the distinction may not be relevant in all possible embodiments,"
Applicants submit that the claims of the present application recite "monitoring information for
the occurrence of an event and publishing the first event upon occurrence of the first event" such
that the claims clearly indicate that publish/subscribe technology is being employed. Although
the specification generally states that the distinction *may not be relevant in all possible
embodiments*, the distinction is relevant in all embodiments of the claimed invention. Thus,
Applicants submit that the specification fully supports the claimed invention, and that

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independent Claims 1, 2, 9, and 10 are distinguishable from Nelson for at least those reasons outlined above.

With respect to the Dictionary relied upon by the Examiner as disclosing pull vs. push technology, Applicants submit that even assuming that "push" technology was generally old and well known in the art, none of the cited references, including Nelson, teaches or suggests using push technology for the application set forth by the claimed invention. Rather, as described above, Nelson only discloses polling an airline system or receiving information from an airline system – there is no teaching or suggestion within Nelson to utilize push technology, let alone publish/subscribe technology, as recited by the claimed invention.

Although discussed above in conjunction with Claim 1, the other independent claims share similar recitations. In particular, neither Nelson nor any of the cited references, taken alone or in combination, teaches or suggests detecting a first event of a plurality of events, where the detecting of the first event includes monitoring information from a memory for the occurrence of an event and publishing the event upon occurrence of the first event, and automatically transmitting a notification to a first entity of the first event, as recited by independent Claims 1, 2, 9, and 10. As such, the rejection of Claims 1, 2, 9, and 10 under 35 U.S.C. §102(e) is overcome.

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CONCLUSION

In view of the amendments and remarks presented above, which do not raise new issues, it is respectfully submitted that all of the present claims of the present application are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.
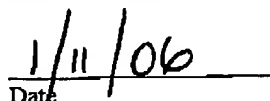
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